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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/658,049	09/08/2000	Ernie Lin	12203-002001	2910
26161	7590	08/04/2004	EXAMINER	
FISH & RICHARDSON PC 225 FRANKLIN ST BOSTON, MA 02110			TRAN, TUAN A	
			ART UNIT	PAPER NUMBER
			2682	16
DATE MAILED: 08/04/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/658,049

Applicant(s)

LIN ET AL.

Examiner

Tuan A Tran

Art Unit

2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,9-14 and 19-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,9-14 and 19-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION*****Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 3, 9-14 and 19-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bullock et al. (2002/0049036) in view of Liebenow (6,522,640) and further in view of Michel et al. (6,147,979) & Ide et al. (5,955,921).

Regarding claims 1, 3, 25 and 29, Bullock discloses a modem (See fig. 1) comprising: a base unit 102 for transmitting a data signal to a computer modem over a wireless medium wherein the base unit being in communication with a telephone line and receiving an original signal from the telephone line and generating the data signal at radio frequency via analog frequency modulation without performing analog-to-digital conversion on the original signal (See fig. 1, 3 and page 3 [0070], page 4 [0076]). However, Bullock does not mention that a communication card which receives the data signal from the base unit and performs echo canceling on the data signal, and the base unit comprises; a hybrid circuit which separates signals flowing between the base unit and the telephone line and produces an echo signal; and an AGC circuit which generates

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a data signal having substantially no linear distortion from a composite signal by maintaining a level of the composite signal within a predetermined linear amplification region. Liebenow teaches a wireless modem (See fig. 2) comprising a base unit and communication card wherein the communication card receives data signals from the base unit over wireless medium and performs echo canceling on the data signal (See fig. 2-4 and col. 3 lines 62-65, col. 4 line 33 to col. 5 line 64). Michel teaches a modem that comprises a hybrid circuit which separates signals flowing between the base unit and the telephone line and produces an echo signal (See fig. 5 and col. 9 lines 1-30). Ide teaches an AGC circuit which generates a data signal having substantially no linear distortion from an input signal by maintaining a level of the composite signal within a predetermined linear amplification region (See figs. 16-17 and col. 29 line 65 to col. 30 line 16, col. 30 lines 58-64, col. 31 lines 29-36). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the communication card as disclosed by Liebenow in the system of Bullock for the advantage of expanding the capability of the system to various types of wireless communication devices and to apply the teachings of Michel and Ide respectively in reconfiguring the base unit as disclosed by Bullock for the advantage of cross coupling the telephone signals to the base unit as well as enhancing the feed forward control process to avoid saturation at the amplifier.

Claims 10, 19, 23-24, 30-33 are rejected for the same reasons as set forth in claims 1, 3, 25 and 29.

Regarding claims 11-14, Bullock & Liebenow & Michel & Ide disclose as cited in claim 10, but they do not mention that the communication card includes a switch, wherein the switch is triggered by a circuitry when the line present indicator detects a wired medium, for selecting a type of medium over which to transmit and receive the data signal. Since Liebenow discloses the communication card capable of operating in two wireless and wire-line modes (See fig. 2 and col. 4 lines 33-50, col. 5 lines 21-25), and establishing a switching circuit to select operation modes based on detection indicating whether or not wired medium interfaced is a common practice in the art; therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to establish a switching circuit to select operation modes based on detection indicating whether or not wired medium interfaced for the advantage of operating the system in the correct mode in accordance to the user's intention.

Claims 9, 20-22, 26-28 are rejected for the same reasons as set forth in claims 11-14.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Ohmagari et al. (5,553,318) discloses transmitter having envelope feedback loop and automatic level control loop.
- Bergmans et al. (4,835,765) discloses arrangement for full-duplex data transmission over two-wire circuit.
- Brooks (4,171,469) discloses abbreviated dialing system.

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- Iyengar et al. (6,745,055) discloses digital cordless telephone with speakerphone in a remote handset.
- Babitch et al. (5,930,719) discloses data and voice cordless telephone system.

### ***Response to Arguments***

Applicant's arguments with respect to pending claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan Tran** whose telephone number is **(703) 605-4255**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Vivian Chin**, can be reached at **(703) 308-6739**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

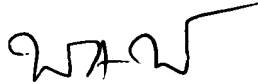
**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



Tuan Tran

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VIVIAN CHIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

7/26/04